

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-005859**Date Inspected:** 25-Mar-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** ZPMC and ABF**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS tower**Summary of Items Observed:**

Bay #10 South and North Tower Shop

North tower lift#1:- Caltrans QA Inspector observed four welders performed FCAW build up weld metal welding on stiffeners which located at exterior bottom tower of skin plate C and D. The buildup metal welding has been approved by Caltrans with file #CWR-00087. The metal buildup on skin plate C is 50mm to 60mm thick and skin plate D is 25mm to 30mm thick. The SMAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans observation, no discrepancies were noted.

North tower lift#1:- Caltrans QA Inspector observed two welders performed SMAW process on inner corner longitudinal seam weld that connected skin plate C to D and skin plate D to E. The weld number is NDS1-A112B/H-2A and NSD1-A112B/H-1B. The welding located at elevation 15m to 18m. The minimum preheat and maximum interpass temperature requirements for SMAW longitudinal seam weld are 110C degree and 230 C degree. The SMAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

South Tower Lift #1:-Caltrans QA Inspector observed three welders performed FCAW repair process on inner corner longitudinal seam weld that connected skin plate C and D. and the weld number is SSD1-A111B/H-124, 91 and 242. All the excavated weld areas have been MT test prior repair welding. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

Bay #11 East and West Tower Shop

West Tower Lift #1:-Caltrans QA Inspector observed four welders performed SMAW root pass process on interior diaphragm that attached to skin plate A. The interior diaphragm located at elevation 23m, 28m, 33m and 38m. The

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SMAW root pass welding was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

East tower lift #1:- Caltrans QA inspector performed final VT inspection on the connection web plate welds and diaphragm welds of skin plate D. Those weld connected to diaphragms, stiffeners and skin plate D. The connection web plate welds and diaphragm welds located at elevation 18m, 23m, 28m, 33m, 38m, 43m and 47.6m. All the welds have been VT accepted by ZPMC and ABF QC prior Caltrans QA inspection. Base on Caltrans inspection, the diaphragm welds appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

Summary of Conversations:

As noted within the report above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer
